| JOB NO. | DWG NO. |
|---|---|
| 1194 | E-03-001 |

## GENERAL NOTES :-

THE FOLLOWING NOTES SHALL APPLY TO ALL DRAWINGS UNLESS OTHERWISE NOTED OR INDICATED

1- ALL DRAWINGS SHALL BE READ IN CONJUCTION WITH THE RELEVANT SECTIONS OF THE ELECTRICAL SERVICES/SPECIFICATION IN THE TENDER DOCUMENT.

2- ALL THE DIMENSIONS SHOWN ON DRAWINGS ARE METRIC ( IN mm ).

3- THE INTENT OF THESE DRAWINGS IS TO GUIDE THE CONTRACTOR IN THE SCHEME OF WORKS. CONTRACTOR SHALL MAKE PROPER SHOP DRAWINGS FOR THE APPROVAL OF THE ENGINEER AND SUBMIT IT BEFORE THE WORK COMMENCES AT SITE.

4- ALL ELECTRICAL WORKS SHALL BE EXECUTED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

5- THE ROUTING OF CABLES SHOWN ON DRAWINGS IS FOR GUIDANCE ONLY IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK, AT THE STAGE OF TENDER, THE RUNS OF ALL CABLES IN RELATION TO STRUCTURAL RESTRICTION SO THAT ALL MATERIALS SUCH AS CONDUITS AND THEIR ACCESSORIES ARE INCLUDED IN HIS PRICE.

6- ACTUAL LOCATIONS OF ALL OUTLETS MUST BE VERIFIED BY THE SITE ENGINEER BEFORE INSTALLATION COMMENCES.

7- ALL ELECTRICAL EQUIPMENT SHALL BE SUPPLIED BY AN APPROVED MANUFACTURER AND THE CONTRACTOR SHALL ENSURE THAT ALL EQUIPMENT ARE SUITABLE FOR THE PURPOSE FOR WHICH IT IS TO BE USED AND THAT IT IS FUNCTIONING PROPERLY AFTER INSTALLATION.

8- AS-BUILT DRAWINGS TOGETHER WITH EQUIPMENT TEST CERTIFICATES, MANUALS, AND INSTRUCTIONS TO USE , ALL IN THREE COPIES ARE TO BE SUBMITTED UPON COMPLETION OF WORKS.

9- COORDINATE WITH OTHER DISCIPLINES TO ACHIEVE THE MOST SUITABLE MOUNTING LOCATIONS IN ORDER TO AVOID ANY CONFLICT MAY OCCUR IN.

10- GENERALLY INDEX OF PROTECTION SHALL BE IP54 FOR ALL ELECTRICAL FITTINGS LOCATED IN WET AREAS OR OUTDOOR AREAS UNLESS OTHERWISE NOTED OR INDICATED.

11- THE DRAWINGS SHOW APPROXIMATE POSITIONS ONLY. THE EXACT POSITIONS SHALL BE DETERMINED ON SITE IN CON-JUCTION WITH COMPANY.

12- ALL CABLES SHALL BE COLOUR CODED THROUGH THEIR ENTIRE LENGTHS AS TO THE PHASE WHICH THEY ARE CONNECTED.

13- ALL 13 AMP SOCKET OUTLET CIRCUITS IN 3 NOS AND MORE SHALL BE CONNECTED TO A RING CIRCUIT.

14- WHERE MULTI GANG LIGHTING SWITCHES ARE INDICATED TO BE ON DIFFERENT PHASES, A PHASE BARRIER OF 500 V AND A WARNING LABEL SHALL BE INCORPORATED WITHIN THE SWITCH BASE.

15- LIGHTING LUMINARIES SPACING IS TO BE MADE TO SUIT POSITIONS IF ANY AND THEIR LOCATIONS SHALL BE AGREED WITH THE ARCHITECTS INSTRUCTION.

16- DRAW WIRES SHALL BE LEFT IN ALL CONDUIT RUNS FOR OTHER SERVICES, THAT IS BETWEEN AHU'S/FCU'S AND THERMOSTATS Etc. AND THESE SHOULD BE IN ACCORDANCE WITH THE DRAWINGS.

17- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EN-SURE THE COMPLETE CO-ORDINATION OF ALL SERVICES.

18- ALL LAMPS AND LUMINARIES SHALL BE SUPPLIED AND INSTALLED UNDER THIS CONTRACT AS PER LIGHT FITTING SPECIFICATION. FOR LOCATION OF EMERGENCY AND EXIT SIGNS REFER TO CIVIL DEFFENCE DRAWINGS.

19- ALL HOLES THROUGH FIRE BARRIERS TO BE FILLED WITH SMOKE / FLAME PROOF FIRE BARRIERS.

20- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING APPROVAL FOR THE DESIGN FROM THE RELEVANT LOCAL AUTHORITIES AND ALSO FOR THE CO-ORDINATION DURING CONSTRUCTION.

21- ELECTRICAL ACCESSORIES IN THE KITCHEN TO BE FULLY CO-ORDINATED WITH THE KITCHEN CABINET LAYOUT AND KITCHEN EQUIPMENT LAYOUT.

22- ALL SOCKET OUTLETS IN DAMP AREAS SHALL BE WEATHERPROOF AND PROTECTD WITH A 30mA SENSITIVITY RCD.

23- CONTRACTOR SHALL PROVIDE POWER POINT FOR THE VARIOUS LOW CURRENT SYSTEM AS PER SUPPLIER'S REQUIREMENT.

24- THE DRAWING SHOWS ONLY INDICATIVE LOCATION FOR THE VARIOUS POWER OUTLETS AND LIGHT FITTINGS THE EXACT LOCATION SHALL BE DETERMINED IN COORDINATION WITH THE FINAL FALSE PARTITIONING LAYOUT, INTERIOR DECORATION, CEILING LAYOUT, KITCHEN EQUIPMENT AND IN ACCORDANCE TO COMPANY INSTRUCTIONS.

25- KWH METER SHALL BE ARRANGED IN A SUITABLE MANNER TO COMPANY AND ADDC APPROVAL.

26- ALL MCB DISTRIBUTION BOARDS FOR LIGHTING AND POWER SHALL BE PROVIDED WITH RCBO OUTGOING WITH SENSITIVITY AS PER ADDC REQUIREMENT.

27- ALL ACBS /MCCBS/ MCBS / RCBO'S / CONTACTORS / ELCBS ETC. SHALL BE CAPABLE OF CARRYING CURRENT INDICATED AT AN AMBIENT TEMPERATURE OF 50° C.

28- ALL EQUIPMENT MOTORS SHALL BE PROVIDED WITH LOCAL ISOLATING SWITCHES OR EMERGENCY LOCK OFF STOP BUTTON.

29- ALL CONDUCTIVE BUT NON CURRENT CARRYING CONDUCTORS SUCH AS WATER PIPES, TRUNKING TRAYS, SHEET STEEL DUCT WORK ETC. SHALL BE BONDED TO MAIN EARTHING NETWORK USING 16/25 mm2 ECC TERMINATED WITH COPPER LUGS.

30- UNDER FLOOR TRUNKING SYSTEM

- TYPE AND SIZE OF UNDER FLOOR TRUNKING SYSTEM INCLUDING SERVICE BOXES SHALL BE SUITABLE FOR THE SCREED DEPTH AVAILABLE AT THE AREA OF INSTALLATION.
- COVERS OF SERVICE BOXES SHALL HAVE THE COLOUR AND RECESS DEPTH MATCHING WITH THE TYPE AND FINISH OF FLOOR/CARPET/TILES AT THE LOCATION OF INSTALLATION.
- LOCATION OF THE VERTICAL ACCESS BOX AND VERTICAL RISERS SHOWN AT VARIOUS AREAS IS ONLY INDICATIVE. EXACT LOCATION OF THE SAME SHALL BE DETERMINED AT SITE IN CO-ORDINATION WITH ALL OTHER SERVICES AND TO CONSULTANT APPROVAL. INSTALLATION SHALL BE SUCH THAT IT SHALL BE HIDDEN FROM THE VIEW AND MERGE WITH THE SURROUNDING FINISH AND ARCHITECTURAL FEATURES. CONTRACTOR SHALL ALLOW ADDITIONAL FLOOR JUNCTION BOXES FOR REROUTING THE UNDER FLOOR TRUNKING IN ORDER TO ACHIEVE THE SAME.

31- LIGHT FITTINGS MARKED WITH "E" ON THE LIGHTING LAYOUT DRAWINGS SHALL HAVE ONE LAMP CONNECTED TO THE CENTRAL EMERGENCY LIGHTING SYSTEM IN A SWITCHED MAINTAINED MODE AND FOR WHICH THE SUPPLY OF THE RELATED BALLAST SHALL BE COORDINATED WITH THE CENTRAL EMERGENCY LIGHT SYSTEM SUPPLIER.

ALL THE ABOVE NOTES AND THOSE GIVEN ON ANY OTHER DRAWINGS SHALL FORM PART OF THIS CONTRACT WHETHER CLARIFIED IN THE SPECIFICATION OR NOT.

## S.L.D LEGEND:

| SYMBOLS | DESCRIPTION |
|---|---|
| 27 | UNDER VOLTAGE PROTECTION |
| 47 | PHASE SEQUENCE PROTECTION |
| 50 | INSTANTANEOUS OVER CURRENT PROTECTION |
| 50N | TIME OVER CURRENT PROTECTION |
| 51 | EARTH FAULT PROTECTION |
| 51G | RESTRICTED EARTH FAULT RELAY |
| 59 | OVER VOLTAGE PROTECTION |
| 63 | TEMPRATURE TRIP RELAY (BUILT INTO TRANSFORMER) WIRED TO IPI |
| 64 | THREE PHASE LOAD BALANCE RELAY |
| PF | POWER FACTR METER |
| HZ | FREQUENCY METER |
| A | AMMETER |
| V | VOLTMETER |
| | POTENTIAL TRANSFORMER |
| | CURRENT TRANSFORMER |
| | TRANSFORMER II/0.433KV DYN II (RATING AS ON DRAWINGS) |
| MDB | MAIN DISTRIBUTION BOARD |
| SMSB | SUB MAIN SWITCH BOARD |
| | FINAL DISTRIBUTION BOARD |
| | MOTOR CONTROL CENTER IP54 OR AS SPECIFIED |
| ACB | 4 POLE WITHDRAWAL TYPE AIR CIRCUIT BREAKER (MOTORIZED TYPE) WITH SHUNT TRIP. |
| MCCB | 4 POLE WITHDRAWAL TYPE MOLDED CASE CIRCUIT BREAKER |
| MCCB | 4 POLE FIXED TYPE MOLDED CASE CIRCUIT BREAKER |

## EARTHING & LIGHTNING LEGEND:

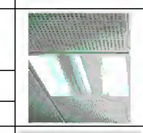
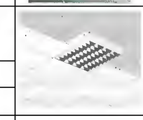
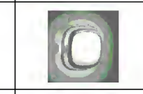
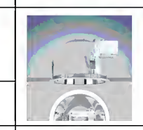
| SYMBOLS | DESCRIPTION |
|---|---|
| | 3000mm DEEP ⌀19mm CU-CLADED STEEL ELECTRODE ENDED BY EARTH PIT AND TEST CLAMP POINT (TYPICAL) |
| | 3x25mm COPPER TAPE HORIZONTAL AIR TERMINAL |
| | MACHINE PROTECTION VERTICAL AIR TERMINAL (HIGHER THAN MACHINES HEIGHT AS REQ. BY BSEN 62305). |
| | 70Sqmm STANDARD SOFT DRAWING COPPER |
| | PURPOSE MADE CROSS CONNECTION CLAMP . |
| | COPPER TAPE FIXING AT 1m INTERVALS |
| | EARTH BAR |
| BC | EARTHING BRANCH CONNECTION (CAD-WELD) |

## ABBREVIATIONS:

| | |
|---|---|
| A | AMETER |
| A.C | ABOVE COUNTER |
| ACB | AIR CIRCUIT BREAKER |
| AF | AMPERE FRAME |
| AFF | ABOVE FINISHED FLOOR |
| AHU | AIR HANDLING UNIT |
| AT | AMPERE TRIP |
| ATS | AUTOMATIC CHANGE OVER TRANSFERABLE SWITCH |
| CU | COPPER |
| DB | DISTRIBUTION BOARD |
| DN | DOWN |
| DP | DOUBLE POLE |
| DPM | DIGITAL POWER METER |
| EF | EXHAUST FAN |
| EPO | EMERGENCY POWER OFF |
| EWH | ELECTRIC WATER HEATER |
| FA | FIRE ALARM |
| FB | FLOOR BOX. |
| FCU | FAN COIL UNIT |
| F.F.L | FINISHED FLOOR LEVEL |
| FLR | FLOOR |

| | |
|---|---|
| G | GROUND |
| GFI | GROUND FAULT INTERRUPTER |
| GI | GALVANIZED IRON |
| GS | GALVANIZED STEEL |
| H | HEIGHT |
| HP | HOT PLATE |
| HZ | HERTZ |
| IP | INDEX OF PROTECTION |
| IU | INSECT KILLER UNIT |
| LV | LOW VOLTAGE |
| V | MOTOR |
| MCB | MINIATURE CIRCUIT BREAKER |
| MCCB | MOLDED CASE CIRCUIT BREAKER |
| MCCI | MOTOR CONTROL CENTER No.I |
| MDB | MAIN DISTRIBUTION BOARD |
| mm | MILLIMETER |
| MMC | MILLIMETER CONDUIT |
| UPS | UNINTERRUPTED POWER SUPPLY |
| V | VOLTMETER |
| P | POLE |
| PF | POWER FACTOR CORRECTION |
| RM | ROOM |
| SW | SWITCH |
| WB | WATER BOILER |

## LEGEND: LIGHTING

| TYPE | SYMBOLS | SHAPE | DESCRIPTION |
|---|---|---|---|
| F1 | |  | RECESSED MOUNTED INDIRECT LIGHTING FIXTURE WITH WHITE PAINTED STEEL WITH MICRO SLOTS, OPAL POLYCARBONATE DIFFUSER SHEET (BEHIND) AND CENTRALLY PLACED ALUMINUM, 2x40W. COMPACT FLUORESCENT LAMP IP20. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM |
| F2 | |  | RECESSED MOUNTED LIGHTING FIXTURE WITH WHITE PAINTED STEEL WITH SPECULAR AND SEMI-SPECULAR ALUMINUM WITH LOW IRIDESCENT FINISH LOUVER, WITH 4x18W. FLUORESCENT LAMP IP20. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM |
| F3 | | | RECESSED MOUNTED LIGHTING FIXTURE WITH WHITE PRE COATED SHEET STEEL ,PRISMATIC DIFFUSER, 4x18W. FLUORESCENT LAMP IP54. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM |
| F4 | EX | | WITH HARDENED EXPLOSION PROOF LUMINAIRE 2x36W FLUORESCENT LAMP, BODY MADE OF POLISHED SHEET STANLESS STEEL, RESISTANT AGAINST OIL VAPOR, EFFECT OF CHEMICALS, AND CLEANING AGENTS, WITH HARDENED BREAK-PROOF SAFETY GLASS IP65 |
| | EX | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | EX E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM |
| F5 | |  | SURFACE MOUNTED LIGHTING FIXTURE WITH DIE CAST ALUMINUM BODY AND OPAL POLYCARBONATE DIFFUSER WITH 2x26W COMPACT FLUORESCENT LAMP IP65. CONNECTED TO CENTRAL BATTERY SYSTEM |
| F6 | | | SURFACE MOUNTED LIGHTING FIXTURE WITH FIBER GLASS REINFORCED POLYESTER HOUSING WITH POLYCARBONATE PRISMATIC CLEAR COVER WITH 2x36W FLUORESCENT LAMP IP67. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |
| F7 | | | SAME AS F6 BUT WALL MOUNTED |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |
| F8 | | | RECESSED MOUNTED DOWN LIGHT WITH 1x13W COMPACT FLOURESCENT LAMP AND REMOTE GEAR BOX WITH GALVANIZED STEEL BODY, SPUN ALUMINUM WITH MATT ANODISED FINISH IP54 . |
| F9 | | | RECESSED MOUNTED DOWN LIGHT WITH DIE CAST ALUMINUM BODY DEEP DRAWN LACQUERED SHEET STEEL CONTROL GEAR BOX WITH 1x26W COMPACT FLUORESCENT LAMP IP 20. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |
| F10 | | | SAME AS F9 BUT 2x26W. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |
| F11 | | | RECESSED MOUNTED DOWN LIGHT WITH POLYESTER GEAR BOX, HIGH BRILLIANT FACETED MEATLESS REFLECTOR WITH 1x26W COMPACT FLUORESCENT IP54. |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |
| F12 | | | WALL RECESSED STEP LIGHT, WITH 1x18W FLUORESCENT LAMP IP54 |
| F13 | | | SURFACE MOUNTED BULK HEAD WITH DIE CAST ALUMINIUM BODY AND OPAL POLYCARBONATE DIFFUSER OVAL SHAP WITH 2X26W COMPACT FLUORESCENT LAMP IP 65. |
| F14 | | | SINGLE SIDED ACRYLIC GLASS PANEL EXIT SIGN, WITH 8W COMPACT LAMP, CEILING/WALL MOUNTED, IP20. |
| F15 | | | SAME AS F14 BUT DOUBLE SIDED TYPE. |
| F16 | | | LINEAR/FLEXO COVE LIGHT WITH LOW XENON RIGID LAMPS, IP20, COMPLETE WITH ALL ACCESSORIES, TRANSFORMERS, ..etc. |
| F17 | | | SAME AS F3 BUT WITH 2x36 W |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |
| F18 | |  | RECESSED MOUNTED DOWN LIGHT WITH 2x42 w COMPACT FLUORESCENT LAMP WITH WITH ALUMINIZED, MIRROROBRITE AND IRIDESCENT FREE REFLECTOR, IP20. CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM |
| F19 | | | LIGHTING BOLLARD , 1x100W, 75cm INCANDESCENT LAMP IP44 |
| F20 | | | TRANSPARENT DIFFUSER LUMINAIRE HOUSING MADE OF POLYCARBONATE INJECTION MOULDED DIFFUSER MADE OF POLYCARBONATE WITH FLOURESCENT LAMP 2x36 W. IP65 |
| | | | DITTO BUT CONNECTED TO EMERGENCY CIRCUITS. |
| | E | | DITTO BUT CONNECTED TO CENTRAL BATTERY SYSTEM. |

## LEGEND:- POWER:

| TYPE | SYMBOLS | DESCRIPTION |
|---|---|---|
| S01 | | 3 COMPARTMENT FLOOR FLUSH SERVICE BOX (250x250mm) SUITABLE FOR UNDER FLOOR TRUNKING SYSTEM WITH 2 No. 13A TWIN SWITCHED SOCKET OUTLETS AND AS PER SPECIAL SYSTEMS No. TWIN RJ45 OUTLETS |
| S02 | | 13A, 240V, 2P+E SWITCHED SOCKET OUTLET |
| S03 | | 13A, 240V,TWIN SOCKET 2P+E SWITCHED SOCKET OUTLET |
| S04 | | 13A, 240V, 2P+E WEATHER PROOF SWITCHED SOCKET OUTLET IP55 MINIMUM |
| S05 | | 16A, 240V, 2P+E , INDUSTRIAL TYPE SOCKET OUTLET |
| S06 | | 32A, 240V, 2P+E , INDUSTRIAL TYPE SOCKET OUTLET |
| S07 | | SAME AS S03 BUT WITH DIFFERENT COLOR FED FROM UPS PANEL |
| S08 | | POWER OUTLET BOX INTEGRATED IN FUME HOOD CUPBOARDS COMPLETE WITH MCB PANEL, EARTH LEAKAGE 30mmA, 1 OUTLET TWIN SWITCHED 2P+E, 16A , 1 OUTLET SWITCHED 2P+E, 32A 1 LIGHT AND AN EMERGENCY STOP SWITCH (REFER TO DETAILED DIAGRAM) (BY FURNITURE CONTRACTOR) |
| S09 | | POWER OUTLET BOX MOUNTED TO BENCH TABLE TOP SEPARATOR WALL COMPLETE WITH MCB PANEL, EARTH LEAKAGE 30mA, 2 OUTLET TWIN SWITCHED 2P+E, 16A , 1 OUTLET 2P+E, 32A. AND AN EMERGENCY STOP SWITCH (REFER TO DETAILED DIAGRAM) (BY FURNITURE CONTRACTOR) |
| S10 | X1+X2 | POWER OUTLET BOX MOUNTED TO BENCH TABLE TOP SEPARATOR WALL COMPLETE WITH MCB PANEL, EARTH LEAKAGE 30mA, X2 OUTLET TWIN SWITCHED 2P+E, 16A , X1 OUTLET 2P+E, 32A. AND AN EMERGENCY STOP SWITCH (REFER TO DETAILED DIAGRAM) (BY FURNITURE CONTRACTOR) |
| S11 | | 20A, 240V, 50HZ DOUBLE POLE SWITCH WITH NEON INDICATION |
| S12 | C | 13A, 240V, 2P+E SWITCHED SOCKET OUTLET ABOVE FALSE CEILING FOR CCTV CAMERA |
| S13 | A/V | 13A, 240V, 2P+E SWITCHED SOCKET OUTLET ABOVE FALSE CEILING FOR AUDIO VISUAL RACK |
| S14 | P | 13A, 240V, 2P+E SWITCHED SOCKET OUTLET ABOVE FALSE CEILING FOR OVERHEAD PROJECTOR |
| S15 | S | 13A, 240V, 2P+E SWITCHED SOCKET OUTLET ABOVE FALSE CEILING FOR MOTORIZED SCREEN |
| S16 | | FLOOR MOUNTED 2P+E SWITCHED SOCKET OUTLET 40A, 240V WITH SAFETY SHUTTERS IP54, FED FROM UPS |
| S17 | A X1 X3 | DISTRIBUTION ASSEMBLIES WITH INCOMING MCB RATING AS FEEDING BREAKER -X1 NO. OUTGOING MCB 16A-1ph, EACH FEEDING 16A 240V INDUSTRIAL SOCKET OUTLET -X3 NO. OUTGOING MCB 32A-3PH, FEEDING 32A ,415V INDUSTRIAL SOCKET OUTLETS FEEDING FROM FALSE CEILLING |
| S18 | B X3 | DISTRIBUTION ASSEMBLIES WITH INCOMING MCB RATING AS FEEDING BREAKER -X3 NO. OUTGOING MCB 32A-3PH, FEEDING 32A ,415V INDUSTRIAL SOCKET OUTLETS FEEDING FROM FALSE CEILLING |
| S19 | C X1 | DISTRIBUTION ASSEMBLIES WITH INCOMING MCB RATING AS FEEDING BREAKER -X1 NO. OUTGOING MCB 16A-1ph, EACH FEEDING 16A 240V INDUSTRIAL SOCKET OUTLET FEEDING FROM FALSE CEILLING |
| IS1 | | SINGLE PHASE ISOLATOR ABOVE FALSE CEILING RATING SAME AS FEEDING BREAKER |
| IS2 | | THREE PHASE ISOLATOR RATING SAME AS FEEDING BREAKER UNLESS OTHER WISE SHOWN ON DRAWINGS, IP20 |
| HD | HD | JUNCTION BOX INSTALLED BEHIND HAND DRYERCONTROLLED BY REMOTE DP-SW |
| WH | WH | WATER HEATER |
| | | EMERGENCY STOP BUTTON |
| | | VERTICAL ACCESS BOX FOR 3 COMPARTMENT TRUNKING ABOVE FALSE CEILING (SIZE-300x200mmx50mm) |
| | SMSB | SUB MAIN SWITCH BOARD |
| | DB | FINAL DISTRIBUTION BOARD |
| | | UPVC CONDUIT CONCEALED IN CONCRETE OR GROUND |
| | | DITTO AS ABOVE BUT FOR UPS CIRCUITS |
| | | 3 COMPARTMENT GI UNDER FLOOR TRUNKING WITH EARTH TRUNKING SIZE OF 75x25mm (BRANCH TRUNKING) |
| | | 100A, 400V, TPN+E PLUG-IN, CU-HORIZONTAL BUS BAR LINES ABOVE EACH CLUSTER OF BENCHES, FOR GENERAL EXPERMENTAL USE, PROVIDED WITH LOCAL MAIN ELCB-CONTROLLER, 5 NOS PLUG-IN TYPE 30A,SPN,MCCBS AND 3 NOS PLUG-IN TYPE 30A, TPN, MCCBS. |

## LIGHTING SWITCHES LEGEND:

| TYPE | SYMBOLS | DESCRIPTION |
|---|---|---|
| S1 | | 240V, 10A SINGLE POLE, ONE WAY, FLUSH MOUNTED LIGHTING SWITCH ONE GANG. |
| S2 | | SAME AS S1 BUT IP54. |
| S3 | | 240V, 10A SINGLE POLE, ONE WAY, FLUSH MOUNTED LIGHTING SWITCH TWO GANG IP54 |
| S4 | | 240V, 10A SINGLE POLE, TWO WAY, FLUSH MOUNTED LIGHTING SWITCH ONE GANG IP54 |
| S5 | | 240V, 10A SINGLE POLE, TWO WAY, FLUSH MOUNTED LIGHTING SWITCH TWO GANG IP54 |
| S6 | | TOUCH SENSOR / PUSH BUTTON , LETTERS INDICATES NO. OF GANGS |
| S7 | | DIMMING PUSH BUTTON, LETTERS INDICATES NO. OF GANGS |
| | LCP | LIGHTING CONTROL PANEL |

| REFERENCE DRAWINGS | DWG NO. |
|---|---|
| | |

CLIENT :

ADNOC

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G.F | M.F | K.S | M.N | M.N | ISSUED FOR ADDENDUM No.1 | 26/8/08 | 1 |
| G.F | M.F | K.S | M.N | M.N | ISSUED FOR TENDER | 13/11/08 | 0 |
| PROJ TEAM | | JOB ENG | CHK | BY | REVISIONS | DATE | REV NO. |
| APPROVED | | | | | | | |

PROJECT :

BOROUGE INNOVATION CENTER
IN ABU DHABI
AGREEMENT NO:115984DI - PROJECT NO.5984

END USER :

Borouge

CONSULTANT :

ECG
ENGINEERING CONSULTANTS GROUP S.A. ABU DHABI

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TEL : +02-6728-007
FAX : +02-6728-012
e-mail : ecg emirates.net.ae

LABORATORY BUILDING

LEGEND AND GENERAL NOTES

| SCALE | JOB NO. | DWG NO. | REV NO. |
|---|---|---|---|
| NTS | 1194 | E-03-001 | 1 |

A1

FILENAME